

EXECUTIVE SUMMARY

Prepared June 6, 1995

Mine Name: Last Chance Mine
Operator: Western Clay Company
508 East Center
Aurora, Utah 84620
Telephone: (801) 529-3281
Contact Person: Neal Mortensen

I.D. No: M/015/061
County: Emery
New/Existing: Existing Small Mine
Mineral Ownership: Fee
Surface Ownership: BLM
Lease No.(s): UMC 3472272 & UMC 3472273
Permit Term: Life of Mine

Life of Mine: 10 - 15 years

Legal Description: NE/4 Sec. 7, and the NW/4 Sec. 8, T25S, R6E, SLBM, Emery County, Utah

Mineral(s) to be Mined: Bentonite (clay)

Mining Methods: Open pit mining of a bentonite outcrop. Front end loader removes the clay material which is then disced and stockpiled prior to truck transport to the Western Clay plant in Aurora, Utah.

Acres to be Disturbed: approximately 10.2

Present Land Use: Limited Grazing/Recreation

Postmining Land Use: Limited Grazing/Recreation

Variances from Reclamation Standards (Rule R647) Granted: R647-4-107.5 and R647-4-111.12, No topsoil salvaging, redistribution and revegetation of 1.9 acres of bentonite outcrop is required. No topsoil or vegetation existed on the outcrop area prior to mining.

Soils and Geology:

Soil Description: Silty clay loam, ranging from none to 1 foot thick. Low in nitrogen and phosphorus.

pH: 8.1-8.6

Special Handling Problems: None

Geology Description: Bentonite was deposited under marine conditions from a parent volcanic ash. It is of lower cretaceous underlying the Cedar Mountain and Burro Canyon formations. It rests on the Brushy Basin member of the Morrison formation. The deposit strikes northwest and dips 20-30 degrees northeast.

Hydrology:

Ground Water Description: There are no wells or springs within 500 feet of the mine plan area. It is anticipated that mining will not encounter any groundwater due to the shallow depth of

projected mining activities within the bentonite deposit. No ground water has been encountered in any exploration or developmental drilling conducted to date at the site.

Surface Water Description: No surface water exists in the vicinity of the mine permit area. All drainages within and surrounding the mine plan area are ephemeral in nature which probably flow only as a result of heavy precipitation/runoff events. The bentonite based soils are normally dry due to the local desert environment and will absorb a significant amount of precipitation before runoff is likely to occur. Signs of significant erosional problems have not been observed within the minesite area to date.

Water Monitoring Plan: None required or proposed.

Ecology:

Vegetation Type(s); Dominant Species: Desert shrubland, dominated by Castle valley clover, Alkali sacaton and indian ricegrass. Several specimens of the proposed listed pediocactus winkleri are present within and adjacent to the permit area. The company will mitigate impacts to this proposed threatened and endangered cactus in conjunction with the BLM by locating and transplanting specimens to areas that will not be impacted by mining.

Percent Surrounding Vegetative Cover: 5%

Wildlife Concerns: None.

Surface Facilities: None.

Mining and Reclamation Plan Summary:

During Operations:

Bentonite clay will be removed using a front end loader or dozer. The material is disced, partially dried and stockpiled prior to loading and truck transport to the Western Clay plant in Aurora, Utah. The mine will operate approximately 90 days per year, depending upon market demand.

After Operations:

The disturbed area will be regraded to slopes not exceeding 3H:1V. The pit highwall will be backfilled and recontoured. Approximately 8.3 acres will be covered with 6 inches of topsoil from the topsoil stockpiles and an onsite borrow area. 3000 - 4,000 lbs of alfalfa hay will be tilled into the soil, the area will be fertilized with 40 lbs/acre nitrogen and 100 lbs/ac. phosphorus, then seeded using a seed mix recommended by the BLM (seed mix is included in the plan). Approximately 1.9 acres of barren bentonite outcrop will not be revegetated.

Surety:

Amount: \$40,800 (year 2000 dollars)

Form: Letter of Credit from Utah Independent Bank

Renewable Term: one year (automatic renewal)